



MMWRTM

Morbidity and Mortality Weekly Report

Weekly

September 13, 2002 / Vol. 51 / No. 36

State-Specific Prevalence of Obesity Among Adults with Disabilities — Eight States and the District of Columbia, 1998–1999

The national health objectives for 2010 rank obesity among the top ten leading health indicators (1). Obesity increases the risk for type 2 diabetes, hypertension, dyslipidemia, cardiovascular disease, respiratory problems, certain cancers, gallstones, osteoarthritis, and lowered life expectancy (2–4). The estimated annual cost attributable to obesity-related diseases is approximately \$100 billion (5). Obesity among adults in the general U. S. population increased from 12.0% in 1991 to 17.9% in 1998 (6). Little is known about the national or state prevalence of obesity among persons with disabilities. Obesity is not measured routinely or reported among persons with disabilities (1). To determine the prevalence of obesity among persons with and without disabilities, CDC analyzed data from the 1998 and 1999 Behavioral Risk Factor Surveillance System (BRFSS) for eight states and the District of Columbia (DC). The findings indicate that obesity rates are significantly higher among persons with disabilities, especially among blacks and persons aged 45–64 years. The findings suggest that public health messages and interventions should be targeted to persons with disabilities who are likely to become obese and to obese persons who are likely to become disabled.

BRFSS is an ongoing, random-digit-dialed telephone survey of the noninstitutionalized U.S. population aged ≥ 18 years. The survey consists of a list of questions, including self-reported height and weight, indicators used to calculate body mass index (BMI) (weight in kilograms divided by height in meters squared [weight (kg)/height squared (m^2)]). Obesity is defined as BMI >30.0 kg/ m^2 (5).

For this analysis, data from the 1998 and 1999 BRFSS were aggregated to increase the precision of prevalence estimates. Disability-identifying questions were asked to 52,037 respondents in eight states (Alabama, Arkansas, Iowa, Kansas, New York, North Carolina, Rhode Island, and South Carolina)

and DC. Disability was defined on the basis of a qualifying response to either of the following two questions: "Are you limited in any way in any activities because of an impairment or health problem?" or "If you use special equipment or help from others to get around, what type do you use?" Responses to type of assistance included wheelchair, walker, cane, or another person. Responses of "don't know" and "not sure" were coded as missing values. Previous analysis indicated wide variation in disability prevalence by state (7). BRFSS data for 1998 show rates of disability ranging from 13.6% to 21.8%, with an overall age-adjusted rate of 17.1% in 11 states and DC. Prevalence of disability increased with age; 9.7% of those aged 18–44 years, 22.1% of those aged 45–64 years, and 30.8% of those aged >65 years reported disability (7).

Samples were weighted for age, sex, race/ethnicity, and nonresponse to the survey to estimate the noninstitutionalized civilian population of each state. SUDAAN was used to account for the multistage, stratified samples of this survey and to calculate 95% confidence intervals (CIs). Response rates calculated for participating states using the CASRO method (8) for 1998 ranged from 52.2% (New York) to 75.1% (Kansas) with a median of 60.9%; in 1999, response rates ranged from 45.0% (New York) to 66.3% (Kansas) with a median of 49.6% for the eight states and DC. The sample

INSIDE

- 808 Folate Status in Women of Childbearing Age, by Race/Ethnicity — United States, 1999–2000
- 810 Progress Toward Global Dracunculiasis Eradication, June 2002
- 812 West Nile Virus Activity — United States, September 5–11, 2002, and Texas, January 1–September 9, 2002
- 823 Investigation of Blood Transfusion Recipients with West Nile Virus Infections

CENTERS FOR DISEASE CONTROL AND PREVENTION

SAFER • HEALTHIER • PEOPLETM

The *MMWR* series of publications is published by the Epidemiology Program Office, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30333.

SUGGESTED CITATION

Centers for Disease Control and Prevention. [Article Title]. *MMWR* 2002;51:[inclusive page numbers].

Centers for Disease Control and Prevention

Julie L. Gerberding, M.D., M.P.H.
Director

David W. Fleming, M.D.
Deputy Director for Science and Public Health

Dixie E. Snider, Jr., M.D., M.P.H.
Associate Director for Science

Epidemiology Program Office

Stephen B. Thacker, M.D., M.Sc.
Director

Office of Scientific and Health Communications

John W. Ward, M.D.
Director

Editor, MMWR Series

David C. Johnson
Acting Managing Editor, MMWR (Weekly)

Jude C. Rutledge

Teresa F. Rutledge

Jeffrey D. Sokolow, M.A.
Writers/Editors, MMWR (Weekly)

Lynda G. Cupell

Malbea A. Heilman

Beverly J. Holland

Visual Information Specialists

Quang M. Doan

Erica R. Shaver

Information Technology Specialists

Division of Public Health Surveillance and Informatics

Notifiable Disease Morbidity and 122 Cities Mortality Data

Robert F. Fagan

Deborah A. Adams

Felicia J. Connor

Lateka Dammond

Patsy A. Hall

Pearl C. Sharp

size resulted in estimates for a weighted population of 62,137,000 persons.

Of the total population surveyed, 18.4% were obese (Table 1). Overall, and for each of the four demographic characteristics examined, persons with disabilities had higher rates of obesity (27.4% [95% CI=25.5–29.3]) than those without disabilities (16.5% [95% CI=15.9–17.1]). Substantial differences existed between men with disabilities (25.5% [95% CI=22.7–28.3]) and without disabilities (17.7% [95% CI=16.7–18.7]) and between women with disabilities (29.1% [95% CI=26.6–31.6]) and without disabilities (15.3% [95% CI=14.5–16.1]) (Table 2). In the population without disability, a slight but significantly higher percentage of men than women reported obesity; however, among those with a disability, a larger percentage of women than men tended to report obesity.

A significantly larger percentage of blacks with disabilities reported obesity compared with whites with disabilities. Among whites, 25.7% (95% CI=23.7–27.7) of those with disability reported obesity, compared with 35.8% (95% CI=30.6–41.0) among blacks and 31.1% (95% CI=22.3–40.3) among Hispanics. Significant differences were found in the percentages of persons with and without disabilities for the three age groups; however, the differences were greatest for those aged 45–64 years. A total of 34.4% (95% CI=31.5–37.3) of persons with disabilities in this age group reported obesity compared with 19.5% (95% CI=18.2–20.8) of persons without disabilities.

The estimated prevalence of obesity among persons reporting disabilities varied by state (Table 2). Overall, rates ranged from 22.7% (95% CI=19.8–25.6) in Rhode Island to 35.6% (95% CI=28.9–42.3) in DC. For women, rates ranged from 26.2% (95% CI=22.2–30.2) in Rhode Island to 35.4% (95% CI=19.8–41.0) in Alabama. For men, rates ranged from 22.7% (95% CI=19.8–25.6) in Rhode Island to 35.6% (95% CI=28.9–42.3) in DC. In three states (Alabama, Iowa, and Rhode Island), obesity rates among men with and without disabilities were similar. However, among men with disabilities in DC, men aged 18–44 and 45–64 years were three times more likely to be obese (13.7% versus 36.8% and 16.7% versus 48.7%, respectively).

Reported by: VA Campbell, PhD, JE Crews, DPA, L Sinclair, MPH, Div of Human Development and Disability, National Center on Birth Defects and Developmental Disabilities, CDC.

Editorial Note: The findings in this report indicate that in these eight states, persons with disabilities, regardless of sex, race/ethnicity, or age, have higher rates of obesity than persons without disabilities. These data indicate that obesity is frequently comorbid with disability and underscore both the public health implications of obesity among persons with disabilities and the need to develop public health policies (9)

TABLE 1. Prevalence of obesity* among adults for selected demographic groups, by disability status — Behavioral Risk Factor Surveillance System (BRFSS), eight states and the District of Columbia, 1998–1999

	No disability			Disability		
	%	(95% CI) [†]	Weighted estimate	%	(95% CI)	Weighted estimate
Sex						
Female	15.3	±0.8	26,692,000	29.1	±2.5	5,931,000
Male	17.7	±1.0	25,057,000	25.5	±2.8	4,457,000
Age Group (yrs)						
18–44	15.4	±0.8	29,610,000	24.5	±3.0	3,053,000
45–64	19.5	±1.3	14,158,000	34.4	±2.9	3,829,000
≥65	14.5	±1.5	7,980,000	24.0	±2.7	3,506,000
Race						
Black	24.0	±1.9	7,605,000	35.8	±5.2	1,562,000
White	15.5	±0.7	40,600,000	25.7	±2.0	8,310,000
Other	13.1	±3.6	3,228,000	25.2	±9.5	452,000
Ethnicity						
Hispanic	16.5	±3.7	3,483,000	31.3	±9.0	625,000
Non-Hispanic	16.5	±0.6	47,965,000	27.1	±1.9	9,682,000
Total	16.5	±0.6	51,748,000	27.4	±1.9	10,388,000

* Body mass index ≥ 30 kg/m².

† Confidence interval.

and interventions to prevent or reduce serious weight problems among this population.

These are the first state-level data obtained from BRFSS to estimate the rates of obesity among persons with disabilities. However, additional information is needed about the antecedents and consequences of obesity and disability. The cross-sectional design of BRFSS precludes determining whether respondents became obese before or after developing a disability.

The prevalence of obesity observed in this survey is similar to findings of an analysis of BRFSS data about obesity in the general population (6). National Health and Nutrition Examination Survey data, which calculate BMI based on actual measures, indicate that 23% of persons without disabilities are obese compared with 30% of persons with disabilities.

The findings in this report are subject to at least four limitations. First, because BRFSS does not sample persons aged <18 years or persons who are in institutions, who are in households without a telephone, who are hearing impaired, who have cognitive, speech, and other communication impairments, or who have limited stamina and cannot get to the telephone, findings in this report cannot be generalized to the U.S. population. Second, the sample size for specific racial/ethnic groups was too small to make reliable state-specific generalizations. Third, the survey data are self-reported; such indicators of activity limitations and compensatory strategies used to identify persons with disabilities have not been validated as measures of disability, and persons might not report height and weight accurately, thus affecting the calculation of BMI (10). Finally, CASRO rates for 1999 were substantially

lower than those for 1998; although weighting controls for nonresponse, caution should be exercised in the interpretation of results because missing data from nonparticipants might vary from those provided by survey respondents.

Interventions for obesity should address lifestyle, nutrition, physical activity, and access to facilities designed to promote fitness. Additional data are needed about contributors to obesity among persons with disabilities, including dietary and lifestyle decisions; available food choices; physical activity; use of home-, school-, work-, and community-based fitness facilities; and participation in recreational activities.

References

1. U.S. Department of Health and Human Services. Healthy people 2010. 2nd ed. With understanding and improving health and objectives for improving health (2 vols). Washington, DC: U.S. Department of Health and Human Services, 2000.
2. Pi-Sunyer FX. National Institutes of Health Technology Assessment Conference: medical hazards of obesity. *Ann Intern Med* 1993;119:655–60.

TABLE 2. Percentage of adults that are obese*, by disability status and age group — Behavioral Risk Factor Surveillance System (BRFSS), eight states and the District of Columbia, 1998–1999

State	18–44 yrs		45–64 yrs		≥65 yrs		Total		Total population
	Disability	No disability	Disability	No disability	Disability	No disability	Disability	No disability	
	% (95% CI) [†]	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	
Alabama	31.8 (±7.8)	19.7 (±2.2)	27.1 (±4.6)	23.8 (±3.3)	24.1 (±5.1)	13.4 (±3.0)	29.1 (±4.4)	19.8 (±1.6)	21.4 (±1.5)
Arkansas	28.1 (±6.3)	18.0 (±1.8)	35.4 (±4.5)	22.6 (±2.5)	23.9 (±5.0)	14.6 (±3.3)	29.6 (±3.7)	18.8 (±1.3)	20.8 (±1.2)
District of Columbia	32.0 (±10.5)	14.7 (±2.1)	48.7 (±11.4)	22.8 (±3.9)	24.0 (±7.5)	15.1 (±4.3)	35.6 (±6.7)	17.2 (±1.8)	19.6 (±1.8)
Iowa	20.8 (±4.6)	16.7 (±1.6)	34.4 (±4.6)	22.6 (±2.4)	28.4 (±4.2)	18.0 (±3.0)	26.2 (±2.9)	18.7 (±1.2)	20.4 (±1.1)
Kansas	22.8 (±5.7)	15.4 (±1.4)	35.2 (±5.6)	19.8 (±2.1)	20.4 (±3.8)	13.4 (±2.2)	26.1 (±3.5)	16.4 (±1.0)	17.7 (±1.0)
New York	20.4 (±5.6)	12.7 (±1.5)	34.8 (±6.3)	16.6 (±2.5)	24.2 (±6.1)	15.4 (±3.2)	25.3 (±3.7)	14.3 (±1.2)	16.2 (±1.2)
North Carolina	30.3 (±7.4)	17.4 (±2.0)	39.3 (±7.4)	21.0 (±2.8)	22.4 (±5.0)	11.0 (±2.7)	31.6 (±4.6)	17.4 (±1.4)	19.8 (±1.4)
Rhode Island	19.3 (±4.3)	13.8 (±1.4)	28.8 (±5.2)	18.2 (±2.1)	22.7 (±4.7)	12.7 (±2.2)	22.7 (±2.9)	15.0 (±1.1)	16.2 (±1.0)
South Carolina	27.7 (±6.4)	16.8 (±1.6)	32.8 (±5.2)	21.9 (±2.4)	25.1 (±5.6)	15.5 (±2.9)	28.8 (±3.8)	18.1 (±1.2)	19.7 (±1.1)
Total	24.5 (±3.0)	15.4 (±0.8)	34.4 (±2.9)	19.5 (±1.3)	24.0 (±2.7)	14.4 (±1.5)	27.4 (±1.9)	16.5 (±0.6)	18.4 (±0.6)

* Body mass index ≥ 30 kg/m².

† Confidence interval.

3. Rippe JM, Crossley S, Ringer R. Obesity as a chronic disease; modern medical and lifestyle management. *J Am Diet Assoc* 1998;98:9-15.
4. Solomon CG, Manson JE. Obesity and mortality: a review of the epidemiologic data. *Am J Clin Nutr* 1997;66:1044-50.
5. National Heart, Lung, and Blood Institute. Clinical guidelines on the identification, evaluation, and treatment of overweight and obesity in adults: the evidence report. Bethesda, Maryland: U.S. Department of Health and Human Services, National Institutes of Health 1998.
6. Mokdad AH, Serdula MK, Dietz W, Bowman BA, Marks JS, Koplan JP. The spread of the obesity epidemic in the United States, 1991-1998. *JAMA* 1999;282:1519-22.
7. CDC. State-specific prevalence of disability among adults—11 States and the District of Columbia, 1998. *MMWR* 2000;49:711-4.
8. White AA. Response rate calculation in RDD telephone health surveys: current practices. In: *Proceedings of the American Statistical Association* 1983:277-82.
9. Nestle M, Jacobson MF. Halting the obesity epidemic: a public health policy approach. *Public Health Rep* 2000;115:12-24.
10. Palta M, Prineas RJ, Berman R, Hannan P. Comparison of self-reported and measured height and weight. *Am J Epidemiol* 1982;115:223-30.

Folate Status in Women of Childbearing Age, by Race/ Ethnicity — United States, 1999-2000

In September 1992, the U.S. Public Health Service (PHS) recommended that women of childbearing age (i.e., aged 15-44 years) who are capable of becoming pregnant should consume 400 μg of the B-vitamin folic acid to reduce the number of cases of spina bifida and anencephaly (neural tube defects [NTDs]) (1). Since then, an ongoing national effort has encouraged women to consume dietary supplements containing folic acid (2). In 1998, the Food and Drug Administration (FDA) required the fortification of enriched cereal grain products with folic acid (3), and manufacturers have voluntarily added more folic acid to many ready-to-eat breakfast cereals (CDC, unpublished data, 2002). To assess temporal changes in serum and red blood cell (RBC) folate concentrations among childbearing-aged women, CDC compared folate concentrations for childbearing-aged women who participated during 1988-1994 and 1999-2000 in the National Health and Nutrition Examination Survey (NHANES). This report outlines the results of this comparison and describes serum and RBC folate levels by race/ethnicity. The results indicate that over the period studied, the median serum folate concentration for women aged 15-44 years increased approximately threefold, and the median RBC folate concentration increased approximately twofold. These findings indicate that the national health objective for 2010 to increase the median RBC folate level among women of childbearing age to 220

ng/mL RBC (objective 16.16b) has been met for Mexican-American* and non-Hispanic white women but not for non-Hispanic black women. To reduce the number of pregnancies affected by NTDs further, all women of childbearing age capable of becoming pregnant should consume the PHS-recommended level of folic acid daily (1).

Both NHANES 1988-1994 and NHANES 1999-2000 used a stratified, multistage probability sample of the civilian, U.S. noninstitutionalized population. NHANES 1988-1994 included persons aged >2 months, and NHANES 1999-2000 included persons of all ages. A household interview and a physical examination were conducted for each survey participant. During the physical examination, blood was collected by venipuncture for all persons aged >1 year. Serum and RBC folate were measured in CDC's NHANES Central Laboratory for both NHANES 1988-1994 and NHANES 1999-2000 by using the Bio-Rad Quantaphase IITM simultaneous folate/vitamin B12 radioassay (Bio-Rad Laboratories, Hercules, California) (4). Long-term quality-control data for these assays, including overlapping control materials that were used in both surveys, indicated no analytical drift; results of all external proficiency testing challenges were graded as satisfactory.

From NHANES 1988-1994 to NHANES 1999-2000, median serum folate concentrations for women aged 15-44 years increased from 4.8 to 13.0 ng/mL. The 10th percentile increased from 2.3 to 6.4 ng/mL, and the 75th percentile increased from 7.8 to 18.1 ng/mL (Table 1). Serum folate concentrations increased for each of the three racial/ethnic populations for which estimates could be made (Table 2); in NHANES 1999-2000, the median serum folate concentration was highest for non-Hispanic whites (13.8 ng/mL) and lowest for non-Hispanic blacks (10.2 ng/mL). Similar results were obtained for RBC folate, a better measure of long-term folate status. Median RBC folate concentrations for women aged 15-44 years increased from 159.9 to 263.6 ng/mL RBC (Table 1). RBC folate concentrations increased for all racial/ethnic groups studied (Table 2). In NHANES 1999-2000, the highest RBC folate concentrations occurred among non-Hispanic white women (median: 278.1 ng/mL RBC) and were lowest among non-Hispanic black women (median: 213.8 ng/mL RBC).

Reported by: JD Erickson, DDS, J Mulinare, MD, Q Yang, PhD, National Center on Birth Defects and Developmental Disabilities; CL Johnson, MSPH, National Center for Health Statistics; C Pfeiffer, PhD, EW Gunter, National Center for Environmental Health; WH Giles, MD, BA Bowman, PhD, National Center for Chronic Disease and Health Promotion, CDC.

*Numbers for other Hispanic women were too small for meaningful analysis.

TABLE 1. Selected percentiles of serum (in ng/mL) and red blood cell (RBC) folate concentrations (in ng/mL RBC) for women aged 15–44 years — National Health and Nutrition Examination surveys, United States, 1988–1994 and 1999–2000

		Percentile				
	No.	10th ng/mL (95% CI)*	25th ng/mL (95% CI)	50th ng/mL (95% CI)	75th ng/mL (96% CI)	90th ng/mL (95% CI)
Serum folate						
1988–1994	5,616	2.3 (2.2–2.4)	3.1 (3.0–3.4)	4.8 (4.5– 5.2)	7.8 (7.3– 8.3)	11.7 (10.9–12.8)
1999–2000	1,648	6.4 (5.8–7.0)	9.1 (8.7–9.5)	13.0 (12.1–13.8)	18.1 (16.6–19.5)	26.1 (22.5–29.8)
RBC folate						
1988–1994	5,254	92.2 (88.5– 95.8)	119.5 (115.9–123.4)	159.9 (153.6–168.6)	222.3 (214.2–232.2)	296.6 (284.9–315.2)
1999–2000	1,656	166.2 (157.8–174.7)	204.7 (198.6–210.8)	263.6 (248.3–278.9)	343.0 (324.9–361.1)	432.6 (411.9–453.3)

*Confidence interval.

Editorial Note: Results from NHANES 1999–2000, which was conducted after implementation of food fortification and educational efforts to increase folate consumption, indicate that these public health actions have been effective in increasing folate status among U.S. women of childbearing age. The findings are consistent with reports of improved folate status in selected subsets of the U.S. population (5,6) and the results from the 1999 sample of NHANES 1999–2000 (7). In 1999, the median serum folate concentration was 14.5 ng/mL, and the median RBC folate concentration was 293 ng/mL RBC, somewhat higher than the 1999–2000 results. Both serum and RBC folate concentrations for the 2000 sample of NHANES 1999–2000 were lower than the 1999 sample.

Annual variations in estimates from NHANES can be expected because of the size of the yearly sample and the nature of the sampling design, and these differences might be explained by sampling variability. Other possible explanations include reduced consumption of foods and supplements containing folic acid, a decrease in the folic acid content of fortified foods (8), or undetected variations in laboratory technique. Because of the high level of long-term assay quality-control, changes in laboratory technique probably do not account for the lower folate concentrations in 2000. Another line of evidence suggesting that variations in laboratory technique are not likely to explain the lower folate concentrations in 2000 is that vitamin B12 concentrations in women of childbearing age did not change from NHANES 1988–1994 to

NHANES 1999–2000, even though they are measured simultaneously in the same assay as the folate concentrations.

Women of each of the three racial/ethnic populations compared had substantial increases in serum and RBC folate concentrations over time, indicating that women of all racial/ethnic groups examined have benefited from the public health actions to improve folate status. However, disparities in blood folate concentrations among racial/ethnic groups remain.

Women of childbearing age in the United States who are capable of becoming pregnant should consume 400 µg (0.4 mg) of folic acid per day to reduce their risk for having a pregnancy affected with spina bifida or other NTDs (1). The use of vitamin supplements containing folic acid before and during early pregnancy reduces the risk for NTDs (1). Increases in the reported use of vitamin supplements have been small (9). Because approximately 50% of all pregnancies are unplanned, and because NTDs occur early in pregnancy before many women are aware that they are pregnant, food fortification is probably the most important approach to delivery of folic acid at conception and during early pregnancy.

The data presented in this report are subject to at least one limitation. Because the sample size in NHANES 1999–2000 is smaller than that of NHANES 1988–1994, more data are necessary to allow more detailed analyses of trends in blood folate concentrations in all population subgroups, particularly among young women of varying socioeconomic status.

One of the national health objectives for 2010 is to increase the proportion of pregnancies begun with an optimum folic

acid level by increasing the median RBC folate level to 220 ng/mL RBC among women aged 15–44 years (objective 16.16b) (10). On the basis of NHANES 1999–2000, this objective has been met for non-Hispanic white and Mexican-American women but has not been met for

TABLE 2. Median serum (in ng/mL) and red blood cell (RBC) folate concentrations (in ng/mL RBC) for women aged 15–44 years, by race/ethnicity — National Health and Nutrition Examination surveys, United States, 1988–1994 and 1999–2000

	Non-Hispanic white		Non-Hispanic black		Mexican-American†	
	No.	ng/mL (95% CI)*	No.	ng/mL (95% CI)	No.	ng/mL (95% CI)
Serum folate						
1988–1994	1,582	5.1 (4.7–5.5)	1,779	4.0 (3.9–4.2)	1,648	4.4 (4.2–4.8)
1999–2000	543	13.8 (12.5–15.1)	359	10.2 (9.7–10.6)	584	11.4 (10.1–12.8)
RBC folate						
1988–1994	1,589	169.2 (160.0–177.6)	1,785	123.6 (121.1–128.4)	1,631	157.2 (147.5–167.0)
1999–2000	545	278.1 (259.5–296.7)	363	213.8 (195.5–232.0)	586	247.9 (233.0–262.8)

*Confidence interval.

†Numbers for other Hispanic women were too small for meaningful analysis.

non-Hispanic black women. For the number of pregnancies affected by NTDs to be reduced further, all women of childbearing age capable of becoming pregnant should consume the PHS-recommended level of folic acid daily (1).

References

1. CDC. Recommendations for the use of folic acid to reduce the number of cases of spina bifida and other neural tube defects. MMWR 1992;41 (No. RR-14).
2. CDC. Preventing neural tube defects: a prevention model and resource guide. Atlanta, Georgia: U.S. Department of Health and Human Services, CDC, 1998.
3. Food and Drug Administration. Food standards: amendment of standards of identity for enriched grain products to require addition of folic acid. Federal Register 1996;61:8781-97.
4. Wright JD, Bialostosky K, Gunter EW, et al. Blood folate and vitamin B12: United States, 1988-1994. U.S. Department of Health and Human Services, CDC, National Center for Health Statistics. Vital Health Stat 11(243), 1999.
5. Jacques PF, Selhub J, Bostom AG, Wilson PW, Rosenberg IH. The effect of folic acid fortification on plasma folate and total homocysteine concentrations. N Engl J Med 1999;340:1449-54.
6. Lawrence JM, Pettiti DB, Watkins M, Umekubo MA. Trends in serum folate after food fortification. Lancet 1999;354:915-6.
7. CDC. Folate status in women of childbearing age—United States, 1999. MMWR 2000;49:962-5.
8. Rader JL, Weaver CM, Angyal G. Total folate in enriched cereal-grain products in the United States following fortification. Food Chem 2000;70:275-89.
9. CDC. Knowledge and use of folic acid by women of childbearing age—United States, 1995 and 1998. MMWR 1999;48:325-7.
10. U.S. Department of Health and Human Services. Healthy people 2010, 2nd ed. With understanding and improving health and objectives for improving health (2 vols). Washington, DC: U.S. Department of Health and Human Services, 2000.

Progress Toward Global Dracunculiasis Eradication, June 2002

In 1986, when the World Health Assembly first adopted a resolution calling for the eradication of dracunculiasis (Guinea worm disease), an estimated 3.5 million persons in 20 countries had the disease, and approximately 120 million persons were at risk for infection (1,2). By December 2001, annual incidence of dracunculiasis had decreased approximately 98%, and seven countries (Cameroon, Chad, India, Kenya, Pakistan, Senegal, and Yemen) in which dracunculiasis had been endemic previously had eliminated the disease (3). This report describes the status of the global Dracunculiasis Eradication Program (DEP)* as of June 2002. The findings

indicate that DEP has succeeded in reducing incidence of dracunculiasis substantially; the disease can be eradicated if the remaining 13 countries in which it is endemic detect and contain transmission from the final cases.

For surveillance purposes, village-based health-care workers search for infected persons in each village in which disease is endemic and complete a register that provides a basis for monthly zonal, district, and national surveillance reports (3). During 2001, dracunculiasis was endemic in 13 African countries (Benin, Burkina Faso, Central African Republic, Côte d'Ivoire, Ethiopia, Ghana, Mali, Mauritania, Niger, Nigeria, Sudan, Togo, and Uganda) (2002 population: 353.5 million). These countries reported 63,717 cases from 6,122 villages (4); 3,921 (64%) of these villages were in Sudan, which reported 49,471 (78%) cases.

During January-June 2002, a total of 21,164 cases were reported, including 14,986 (71%) from Sudan. In countries other than Sudan, 6,158 indigenous cases were reported during January-June 2002, a decrease of 26% from the 8,349 cases those countries reported during the same period in 2001 and 53% from the 13,142 cases reported during the same period in 2000 (5). During January-June 2002, Ghana (3,076 cases) and Nigeria (1,993 cases) accounted for 82% of the cases reported outside of Sudan; 2,005 (33%) cases were reported from five districts in Ghana's northern region. A total of 27 cases were exported from one country to another, including 16 from Sudan, five from Togo, four from Ghana, one from Nigeria, and one from Burkina Faso. Mauritania has reported two indigenous cases of dracunculiasis, Uganda has reported four cases, Benin and Ethiopia appear close to interrupting transmission, and dracunculiasis is now confined to relatively restricted areas in Côte d'Ivoire and Mali. In addition, the World Health Organization (WHO) is verifying the occurrence of endemic transmission of dracunculiasis and the extent of the disease in the Central African Republic. During January-June 2002, the incidence of dracunculiasis in southeastern Nigeria, the country's most highly endemic zone, declined 80% compared with the same period in 2001.

Interventions in all 13 countries, including those parts of Sudan not affected by the civil war, have been intensified since mid-2000. For example, cloth filters were distributed in 13 countries to all households in 63% of villages in which the disease is endemic and in 85% of such villages excluding Sudan (Table) (5,6). During January-June 2002, external advisors provided programs with 176 person-months of in-country supervisory assistance compared with 88 person-months during 2000. To prevent further transmission of the infection, some national eradication programs (e.g., in Togo and Ghana) are emphasizing the voluntary physical isolation

*Major program partners include the ministries of health in 20 countries in which dracunculiasis is or was endemic, The Carter Center, United Nations Children's Fund (UNICEF), World Health Organization, Bill and Melinda Gates Foundation, other bilateral and private donors, U.S. Peace Corps, and CDC.

TABLE. Number of indigenous dracunculiasis cases reported, number of villages with endemic disease*, and percentage of villages with endemic disease, by country and intervention†, January–June 2002

Country	No. indigenous cases reported	Reported number of villages with endemic disease	Percentage of villages with endemic disease					% of cases contained
			Reporting monthly	With filters in all households	Using Abate®	With ≥1 source of safe water	Provided health education	
Sudan	14,986	5,110	57	52	1	49	75	51
Ghana	3,076	1,047	97	79	17	43	96	67
Nigeria	1,993	890	99	98	33	55	NA§	64
Togo	531	212	100	93	86	NA	NA	63
Burkina Faso	259	211	92	56	24	82	64	78
Côte d'Ivoire	182	35	100	65	65	65	70	98
Benin	50	46	94	78	80	80	80	93
Mali¶	31	120	100	85	12	35	100	65
Ethiopia	17	15	100	86	100	33	100	71
Niger	13	50	100	100	17	54	100	100
Uganda	4	6	100	77	54	65	100	88
Mauritania	2	25	100	96	4	77	100	100

* As of month of last report.

† Data are provisional.

§ No current data available.

¶ Interventions for Ansongo, Gao, and Tominian districts.

of patients in health facilities or temporary structures when worms are emerging.

Reported by: The Carter Center, Atlanta, Georgia. World Health Organization Collaborating Center for Research, Training and Eradication of Dracunculiasis; Div of Parasitic Diseases, National Center for Infectious Diseases, CDC.

Editorial Note: Dracunculiasis is a parasitic infection caused by *Dracunculus medinensis*. Persons become infected by drinking water from ponds contaminated by copepods (water fleas) that contain immature forms of the parasite. A year after entering the infected person, adult worms 1-meter (approximately 40 inches) long emerge through skin lesions, usually on the lower limbs, which frequently develop severe secondary bacterial infections. No effective treatment or vaccine for the disease exists, and infected persons do not become immune to future infections by the parasite. However, dracunculiasis can be prevented by filtering drinking water through a finely woven cloth, by treating contaminated water with the larvicide Abate® (temephos), by educating persons to avoid entering water sources when worms are emerging from their bodies, and by providing clean water from borehole wells or from protected hand-dug wells.

During January–June 2002, dracunculiasis continued to decline; the two major remaining endemic foci of the disease are in southern Sudan and northern Ghana. Increased efforts to stop transmission of dracunculiasis in northern Ghana are being carried out by the government and its partners (i.e., The Carter Center, United Nations Children's Fund [UNICEF], WHO, U.S. Peace Corps, Ghana Red Cross

Society, and various bilateral donors and nongovernment organizations involved with providing safe sources of drinking water). These efforts are expected to result in reductions similar to those recorded in southeast Nigeria. In southern Sudan, the 19-year-old civil war is the main reason for the high rate of disease. If the intensified political negotiations now under way between the two sides in Sudan succeed in ending hostilities, full access to the final areas of endemic dracunculiasis in southern Sudan might be possible soon. After the war ends and health-care workers gain access to this area, at least 4–5 years will be required to eliminate dracunculiasis, given the extent to which the disease is endemic and southern Sudan's enormous size, geographic barriers, and poor infrastructure and communications networks. With the devotion of sufficient resources and the resolution of civil conflict, Sudan and the other countries in which dracunculiasis is endemic can eradicate this disease.

References

1. Watts SJ. Dracunculiasis in Africa: its geographical extent, incidence, and at-risk population. *Am J Trop Med Hyg* 1987;37:121–7.
2. World Health Assembly. Elimination of dracunculiasis: resolution of the 39th World Health Assembly. Geneva, Switzerland: World Health Organization, 1986 (resolution no. WHA 39.21).
3. Hopkins DR, Ruiz-Tiben E. Strategies for eradication of dracunculiasis. *Bull World Health Organ* 1991;69:533–40.
4. World Health Organization. Dracunculiasis eradication: global surveillance summary, 2001. *Wkly Epidemiol Rec* 2002;77:143–52.
5. CDC. Progress toward global dracunculiasis eradication, June 2000. *MMWR* 2000;49:731–7.
6. CDC. Progress toward poliomyelitis and dracunculiasis eradication—Sudan, 1999–2000. *MMWR* 2001;50:269–73.

West Nile Virus Activity — United States, September 5–11, 2002, and Texas, January 1–September 9, 2002

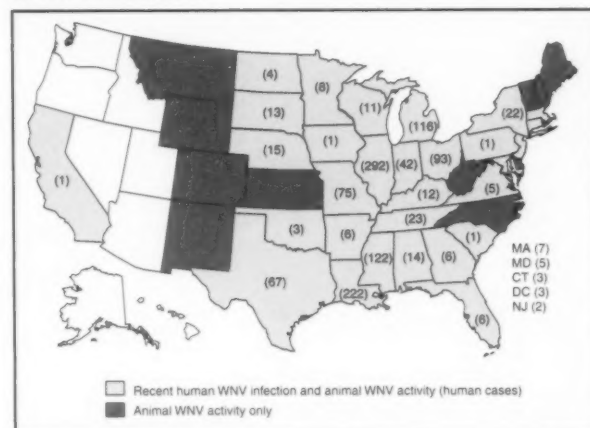
This report summarizes West Nile virus (WNV) surveillance data reported to CDC through ArboNET and by states and other jurisdictions as of 7:30 a.m. Mountain Daylight Time, September 11, 2002.

United States

During the reporting period of September 5–September 11, a total of 464 laboratory-positive human cases of WNV-associated illness were reported from Illinois (n=127), Michigan (n=87), Ohio (n=53), Missouri (n=38), Indiana (n=32), Texas (n=24), Mississippi (n=18), Louisiana (n=17), Nebraska (n=11), New York (n=nine), South Dakota (n=six), Massachusetts (n=five), Minnesota (n=five), Wisconsin (n=five), Florida (n=four), Tennessee (n=four), Arkansas (n=three), Maryland (n=three), Connecticut (n=two), the District of Columbia (n=two), Kentucky (n=two), New Jersey (n=two), Virginia (n=two), Alabama (n=one), California (n=one), and Oklahoma (n=one). During this period, New Jersey reported its first human cases for 2002, and California reported its first WNV activity ever. During the same period, WNV infections were reported in 794 dead crows, 625 other dead birds, 533 horses, and 630 mosquito pools.

During 2002, a total of 1,201 human cases with laboratory evidence of recent WNV infection have been reported from Illinois (n=292), Louisiana (n=222), Mississippi (n=122), Michigan (n=116), Ohio (n=93), Missouri (n=75), Texas (n=67), Indiana (n=42), Tennessee (n=23), New York (n=22), Nebraska (n=15), Alabama (n=14), South Dakota (n=13), Kentucky (n=12), Wisconsin (n=11), Minnesota (n=eight), Massachusetts (n=seven), Arkansas (n=six), Florida (n=six), Georgia (n=six), Maryland (n=five), Virginia (n=five), North Dakota (n=four), Connecticut (n=three), the District of Columbia (n=three), Oklahoma (n=three), New Jersey (n=two), California (n=one), Iowa (n=one), Pennsylvania (n=one), and South Carolina (n=one) (Figure 1). Among the patients with available data, the median age was 54 years (range: 9 months–99 years); 532 (53%) were male, and the dates of illness onset ranged from June 10 to September 6. A total of 43 human deaths have been reported. The median age of decedents was 79 years (range: 48–99 years); 26 (60%) deaths were among men. In addition, 4,037 dead crows and 2,857 other dead birds with WNV infection were reported from 39 states, New York City, and the District of Columbia; 1,692 WNV infections in mammals (all equines) have been reported from 29 states (Alabama, Arkansas, Colorado, Florida, Georgia, Illinois, Indiana, Iowa, Kansas,

FIGURE 1. Areas reporting West Nile virus (WNV) activity — United States, 2002*



* As of 7:00 a.m. Mountain Daylight Time, September 11, 2002.

Kentucky, Louisiana, Maryland, Minnesota, Mississippi, Montana, Nebraska, New Mexico, New York, North Dakota, Ohio, Oklahoma, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Vermont, Virginia, and Wyoming). During 2002, WNV seroconversions have been reported in 173 sentinel chicken flocks from Florida, Nebraska, Pennsylvania, and New York City; 2,577 WNV-positive mosquito pools have been reported from 21 states (Alabama, Arkansas, Connecticut, Delaware, Georgia, Illinois, Indiana, Kentucky, Maryland, Massachusetts, Mississippi, Nebraska, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, South Dakota, Texas, Vermont, and Virginia), New York City, and the District of Columbia.

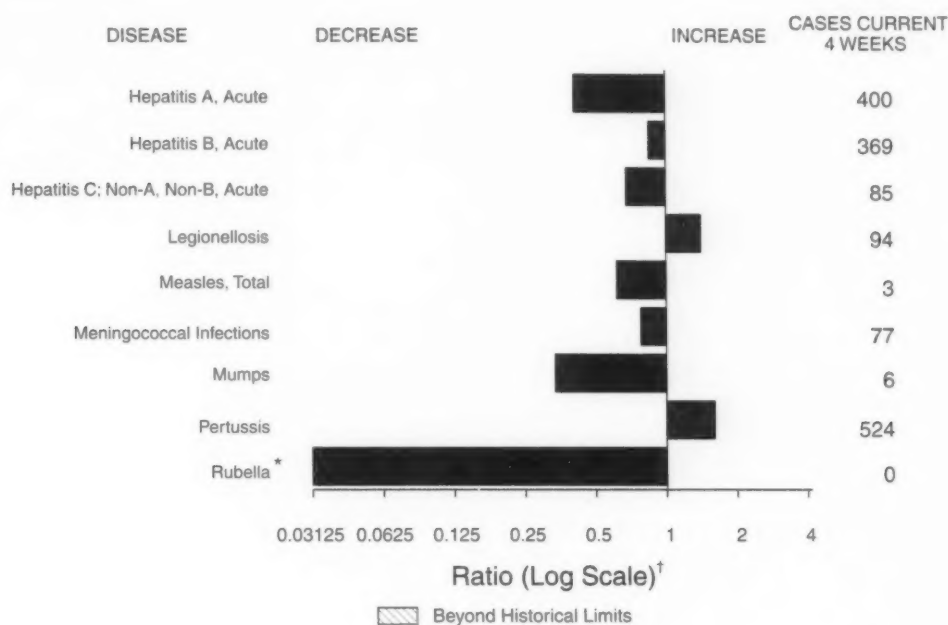
Texas

During January 1–September 9, 2002, the Texas Department of Health (TDH) identified 67 persons with WNV-associated encephalitis; 24 cases were laboratory confirmed, and 43 were classified as probable. One case was fatal.

Among 63 patients with available data, the median age was 55 years (range: 20–85 years); 57% were male. Cases have been reported in 12 counties, with 42 cases reported in Harris County (Figure 2). The attack rate was 0.3 per 100,000 population in Texas and 1.2 in Harris County. In all but two counties, human cases were preceded by the identification of WNV in other species.

WNV activity has been detected in 76 of Texas' 254 counties. Positive mosquito pools (132) have been found in 11 counties, positive birds (210) in 13 counties, and WNV-associated encephalitis in 297 horses in 62 counties.

(Continued on page 823)

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending September 7, 2002, with historical data

* No rubella cases were reported for the current 4-week period yielding a ratio for week 36 of zero (0).

† Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending September 7, 2002 (36th Week)*

	Cum. 2002	Cum. 2001		Cum. 2002	Cum. 2001
Anthrax	2	1	Encephalitis: West Nile [†]	134	25
Botulism: foodborne	11	33	Hansen disease (leprosy) [†]	54	48
infant	40	67	Hantavirus pulmonary syndrome [†]	10	6
other (wound & unspecified)	15	12	Hemolytic uremic syndrome, postdiarrheal [†]	125	109
Brucellosis [†]	48	91	HIV infection, pediatric ^{†§}	116	127
Chancroid	50	25	Plague	-	2
Cholera	6	4	Poliomyelitis, paralytic	-	-
Cyclosporiasis [†]	145	100	Psittacosis [†]	17	9
Diphtheria	1	2	Q fever [†]	24	18
Ehrlichiosis: human granulocytic (HGE) [†]	223	150	Rabies, human	2	1
human monocytic (HME) [†]	88	84	Streptococcal toxic-shock syndrome [†]	61	58
other and unspecified	5	4	Tetanus	18	26
Encephalitis: California serogroup viral [†]	43	43	Toxic-shock syndrome	79	85
eastern equine [†]	1	5	Trichinosis	12	13
Powassan [†]	-	-	Tularemia [†]	49	101
St. Louis [†]	-	63	Yellow fever	1	-
western equine [†]	-	-			

-: No reported cases.

* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

† Not notifiable in all states.

§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last update July 28, 2002.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending September 7, 2002, and September 8, 2001 (36th Week)*

Reporting Area	AIDS		Chlamydia†		Cryptosporidiosis		Escherichia coli, Enterohemorrhagic		Shiga Toxin Positive, Serogroup non-O157	
	O157:H7									
	Cum. 2002†	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	24,713	26,945	512,125	526,166	1,614	2,495	2,029	2,003	93	96
NEW ENGLAND	1,011	981	18,141	16,435	108	97	172	183	27	29
Maine	23	26	1,097	891	9	11	25	23	5	-
N.H.	20	23	1,083	947	21	5	19	23	-	3
Vt.	8	11	591	420	19	26	5	11	1	1
Mass.	519	532	7,440	7,056	32	42	80	90	8	9
R.I.	71	70	1,872	2,005	14	3	9	9	-	-
Conn.	370	319	6,058	5,116	13	10	34	27	13	16
MID. ATLANTIC	5,619	6,909	57,023	57,442	187	212	153	138	-	-
Upstate N.Y.	404	1,042	11,414	9,055	69	63	115	84	-	-
N.Y. City	3,210	3,732	19,652	20,692	78	88	9	13	-	-
N.J.	925	1,153	7,368	10,115	8	11	29	41	-	-
Pa.	1,080	982	18,589	17,580	32	50	N	N	-	-
E.N. CENTRAL	2,494	1,909	87,908	96,483	404	1,220	451	519	10	6
Ohio	453	360	20,995	25,054	90	113	93	107	8	4
Ind.	347	223	11,324	10,531	27	54	38	56	-	-
Ill.	1,170	879	23,346	29,411	54	451	108	132	-	-
Mich.	398	328	22,096	20,349	74	122	86	67	2	2
Wis.	126	119	10,147	11,138	159	480	126	157	-	-
W.N. CENTRAL	421	572	29,055	26,658	246	289	326	306	17	27
Minn.	90	101	6,383	5,468	122	102	113	113	14	24
Iowa	54	65	3,420	3,139	28	62	72	53	-	-
Mo.	189	263	10,305	9,605	24	33	45	40	N	N
N. Dak.	1	2	682	702	6	9	3	13	-	1
S. Dak.	3	19	1,460	1,218	17	6	31	25	1	1
Nebr.	43	58	2,263	2,343	39	75	38	46	2	1
Kans.	41	64	4,542	4,183	10	2	24	16	-	-
S. ATLANTIC	7,537	8,169	97,981	101,963	226	250	176	157	22	18
Del.	131	184	1,796	1,947	2	3	4	3	-	-
Md.	1,066	1,083	10,434	10,133	17	29	18	14	-	-
D.C.	371	586	2,265	2,189	4	10	-	-	2	2
Va.	538	714	10,376	12,688	9	15	32	41	-	-
W. Va.	58	56	1,627	1,612	2	2	4	9	-	-
N.C.	555	549	16,757	15,298	25	19	29	35	-	-
S.C.	547	489	8,335	10,945	4	6	4	12	-	-
Ga.	1,160	930	19,528	21,977	100	111	47	23	10	9
Fla.	3,111	3,578	26,863	25,174	63	55	38	20	10	7
E.S. CENTRAL	1,128	1,257	32,026	33,866	91	35	73	102	-	-
Ky.	173	244	5,607	6,134	3	3	19	54	-	-
Tenn.	483	390	11,030	10,316	47	10	31	27	-	-
Ala.	197	308	8,266	9,163	37	11	16	13	-	-
Miss.	275	315	7,123	8,253	4	11	7	8	-	-
W.S. CENTRAL	2,696	2,782	73,703	73,889	25	88	42	145	-	-
Ark.	163	141	4,509	5,170	7	5	7	9	-	-
La.	693	588	13,451	12,584	4	7	1	7	-	-
Okla.	133	170	7,607	7,235	9	9	16	19	-	-
Tex.	1,707	1,883	48,136	48,900	5	67	18	110	-	-
MOUNTAIN	790	960	31,539	31,292	119	121	220	190	12	10
Mont.	8	14	1,387	1,340	4	8	16	11	-	-
Idaho	18	17	1,599	1,252	21	12	31	38	5	2
Wyo.	6	2	643	574	8	4	6	6	1	-
Colo.	157	211	9,506	8,938	42	33	58	71	2	5
N. Mex.	53	88	4,431	4,217	18	18	5	10	3	3
Ariz.	327	383	9,797	9,882	12	6	28	19	1	-
Utah	43	82	1,755	1,586	11	35	53	24	-	-
Nev.	178	163	2,421	3,503	3	5	21	11	-	-
PACIFIC	3,017	3,406	84,749	88,138	208	183	416	263	5	6
Wash.	302	361	9,621	9,299	37	U	97	65	-	-
Oreg.	216	134	4,733	5,055	28	28	147	43	5	6
Calif.	2,416	2,857	65,062	69,239	142	151	133	139	-	-
Alaska	17	16	2,427	1,852	-	1	6	4	-	-
Hawaii	66	38	2,906	2,693	1	3	33	12	-	-
Guam	2	9	-	280	-	-	N	N	-	-
P.R.	668	815	1,695	1,777	-	-	-	-	1	-
V.I.	66	2	98	119	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	132	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

† Chlamydia refers to genital infections caused by *C. trachomatis*.

‡ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update July 28, 2002.

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 7, 2002, and September 8, 2001 (36th Week)*

Reporting Area	Escherichia coli, Enterohemorrhagic		Giardiasis	Gonorrhea		Haemophilus influenzae, Invasive				
	Shiga Toxin Positive, Not Serogrouped					All Ages, All Serotypes		Age <5 Years Serotype B		
	Cum. 2002	Cum. 2001		Cum. 2002	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	33	8	10,438	216,674	242,652	1,091	1,062	18	19	
NEW ENGLAND	-	1	1,089	5,092	4,579	77	79	-	1	
Maine	-	-	131	88	100	1	1	-	-	
N.H.	-	-	29	80	123	7	4	-	-	
Vt.	-	1	84	70	48	6	3	-	-	
Mass.	-	-	533	2,266	2,168	38	37	-	1	
R.I.	-	-	101	596	525	10	3	-	-	
Conn.	-	-	211	1,992	1,615	15	31	-	-	
MID. ATLANTIC	-	1	2,242	25,726	28,214	189	152	3	3	
Upstate N.Y.	-	-	765	5,882	5,528	86	51	2	-	
N.Y. City	-	-	877	7,987	8,644	45	39	-	-	
N.J.	-	-	220	4,082	5,278	38	35	-	-	
Pa.	-	1	380	7,775	8,764	20	27	1	3	
E.N. CENTRAL	12	2	1,885	42,580	50,270	171	196	3	2	
Ohio	11	2	601	11,547	13,760	63	53	-	1	
Ind.	-	-	-	4,831	4,479	35	37	1	-	
Ill.	-	-	421	12,587	16,292	56	69	-	-	
Mich.	1	-	567	9,963	11,645	10	12	2	-	
Wis.	-	-	296	3,652	4,094	7	25	-	1	
W.N. CENTRAL	-	2	1,272	11,330	11,384	44	53	1	1	
Minn.	-	-	472	1,902	1,746	31	28	1	-	
Iowa	-	-	199	802	890	1	-	-	-	
Mo.	N	N	323	5,831	5,860	9	16	-	-	
N. Dak.	-	2	11	37	25	-	6	-	-	
S. Dak.	-	-	48	173	189	-	-	-	-	
Nebr.	-	-	116	707	831	-	2	-	1	
Kans.	-	-	103	1,878	1,843	3	1	-	-	
S. ATLANTIC	-	-	1,920	56,586	63,337	282	259	4	1	
Del.	-	-	32	1,094	1,139	-	-	-	-	
Md.	-	-	76	5,787	6,043	65	64	2	-	
D.C.	-	-	29	1,891	1,994	-	-	-	-	
Va.	-	-	179	6,224	7,581	22	20	-	-	
W. Va.	-	-	35	661	445	13	10	-	1	
N.C.	-	-	-	11,104	11,777	27	41	-	-	
S.C.	-	-	70	5,052	7,947	9	4	-	-	
Ga.	-	-	604	10,790	12,115	74	66	-	-	
Fla.	-	-	895	13,983	14,296	72	54	2	-	
E. S. CENTRAL	7	1	230	18,335	21,999	47	61	1	-	
Ky.	7	1	-	2,318	2,424	4	2	-	-	
Tenn.	-	-	102	6,374	6,918	24	31	-	-	
Ala.	-	-	128	5,373	7,213	14	26	1	-	
Miss.	-	-	-	4,270	5,444	5	2	-	-	
W.S. CENTRAL	-	-	144	32,725	36,419	42	40	2	1	
Ark.	-	-	99	2,630	3,255	2	-	-	-	
La.	-	-	2	8,327	8,731	3	6	-	-	
Okla.	-	-	43	3,234	3,336	32	33	-	-	
Tex.	-	-	-	18,534	21,097	5	1	2	1	
MOUNTAIN	14	1	1,011	6,686	7,153	136	115	2	6	
Mont.	-	-	60	60	78	-	-	-	-	
Idaho	-	-	75	58	55	2	1	-	-	
Wyo.	-	-	21	42	47	1	1	-	-	
Colo.	14	1	328	2,303	2,172	27	32	-	-	
N. Mex.	-	-	116	904	673	21	16	-	1	
Ariz.	-	-	130	2,412	2,721	63	49	1	3	
Utah	-	-	192	173	125	15	5	-	-	
Nev.	-	-	89	734	1,282	7	11	1	2	
PACIFIC	-	-	645	17,614	19,297	103	107	2	4	
Wash.	-	-	239	1,894	2,073	2	2	1	-	
Oreg.	-	-	275	583	782	50	31	-	-	
Calif.	-	-	-	14,297	15,735	22	47	1	4	
Alaska	-	-	64	398	273	1	6	-	-	
Hawaii	-	-	67	442	434	28	21	-	-	
Guam	-	-	-	-	32	-	-	-	-	
P.R.	-	-	20	250	398	1	1	-	-	
V.I.	-	-	-	25	20	-	-	-	-	
Amer. Samoa	U	U	U	U	U	U	U	U	U	
C.N.M.I.	-	U	1	13	U	-	U	-	U	

N: Not notifiable. U: Unavailable. -: No reported cases.

* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 7, 2002, and September 8, 2001 (36th Week)*

Reporting Area	<i>Haemophilus influenzae</i> , Invasive				Hepatitis (Viral, Acute), By Type					
	Age <5 Years									
	Non-Serotype B		Unknown Serotype		A		B		C; Non-A, Non-B	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	176	175	15	22	5,692	6,578	4,619	4,879	4,217	2,815
NEW ENGLAND	8	13	-	-	218	414	163	89	20	30
Maine	-	-	-	-	7	8	6	5	-	-
N.H.	-	1	-	-	11	11	13	10	-	-
Vt.	-	-	-	-	1	8	3	5	12	6
Mass.	5	7	-	-	96	182	84	18	8	24
R.I.	-	-	-	-	29	26	21	17	-	-
Conn.	3	5	-	-	74	179	36	34	-	-
MID. ATLANTIC	24	23	-	3	663	850	946	941	1,147	890
Upstate N.Y.	10	7	-	1	134	172	92	83	41	19
N.Y. City	7	6	-	-	275	302	473	439	-	-
N.J.	4	3	-	-	87	213	225	208	1,083	823
Pa.	3	7	-	2	167	163	156	211	23	48
E.N. CENTRAL	27	32	1	2	778	833	579	668	72	126
Ohio	7	9	1	-	248	165	78	82	6	8
Ind.	7	6	-	1	35	64	31	36	-	1
Ill.	11	11	-	-	201	311	83	98	10	9
Mich.	1	-	-	1	170	238	387	422	56	108
Wis.	1	6	-	-	124	55	-	30	-	-
W.N. CENTRAL	2	2	3	6	237	268	150	141	634	839
Minn.	2	1	1	2	32	24	18	12	-	7
Iowa	-	-	-	-	60	26	12	16	1	-
Mo.	-	-	2	4	66	60	82	81	619	821
N. Dak.	-	1	-	-	1	2	4	-	-	-
S. Dak.	-	-	-	-	3	2	1	1	1	-
Nebr.	-	-	-	-	16	29	20	20	9	5
Kans.	-	-	-	-	59	125	13	11	4	6
S. ATLANTIC	40	36	2	5	1,771	1,324	1,215	927	126	52
Del.	-	-	-	-	9	9	7	21	5	3
Md.	3	5	-	1	214	168	88	96	9	6
D.C.	-	-	-	-	56	33	14	11	-	-
Va.	3	5	-	-	74	94	140	115	5	-
W. Va.	1	1	1	-	15	9	18	20	2	9
N.C.	3	2	-	4	164	132	175	133	22	16
S.C.	2	1	-	-	49	61	70	24	4	5
Ga.	16	14	-	-	374	665	338	282	29	-
Fla.	12	8	1	-	816	153	365	225	50	13
E.S. CENTRAL	10	12	1	2	181	277	233	326	136	165
Ky.	1	-	-	1	40	89	38	36	3	6
Tenn.	6	6	-	-	70	104	83	162	26	54
Ala.	3	5	1	1	29	64	54	65	4	3
Miss.	-	1	-	-	42	20	58	63	103	102
W.S. CENTRAL	10	5	-	-	253	671	354	578	1,933	568
Ark.	1	-	-	-	29	56	64	67	5	6
La.	1	-	-	-	25	73	33	89	17	120
Okla.	6	5	-	-	38	94	22	79	4	4
Tex.	2	-	-	-	161	448	235	343	1,907	438
MOUNTAIN	32	19	7	1	420	544	436	340	67	43
Mont.	-	-	-	-	11	9	4	2	-	1
Idaho	1	-	-	-	23	48	6	10	-	2
Wyo.	-	-	-	-	2	6	14	1	5	5
Colo.	2	2	-	-	71	61	64	74	30	6
N. Mex.	6	7	1	1	15	31	107	96	1	11
Ariz.	15	8	5	-	221	278	169	105	4	9
Utah	5	2	-	-	41	57	33	18	4	2
Nev.	3	-	1	-	36	54	39	34	23	7
PACIFIC	23	33	1	3	1,171	1,397	543	869	82	102
Wash.	1	1	-	1	119	93	48	97	16	16
Oreg.	5	5	-	-	51	85	93	118	15	13
Calif.	13	25	1	1	992	1,191	393	631	51	73
Alaska	1	1	-	-	7	14	3	8	-	-
Hawaii	3	1	-	1	2	14	6	15	-	-
Guam	-	-	-	-	-	1	-	-	-	-
P.R.	-	1	-	-	76	141	68	185	-	1
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	U	U	-	U	U	U	U	U

N: Not notifiable.

U: Unavailable.

-: No reported cases.

* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 7, 2002, and September 8, 2001 (36th Week)*

Reporting Area	Legionellosis		Listeriosis		Lyme Disease		Malaria		Measles Total	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	641	677	325	408	8,542	10,409	809	1,043	19 [†]	97 [‡]
NEW ENGLAND	55	39	41	34	1,869	3,071	44	68	-	5
Maine	2	5	4	-	53	-	4	4	-	-
N.H.	4	7	4	2	166	55	6	2	-	-
Vt.	21	4	2	2	17	12	2	1	-	1
Mass.	19	12	20	18	701	944	15	35	-	3
R.I.	1	2	1	1	186	267	3	6	-	-
Conn.	8	9	10	11	746	1,793	14	20	-	1
MID. ATLANTIC	151	153	66	66	5,440	5,495	178	304	6	18
Upstate N.Y.	53	40	32	21	3,411	1,945	30	43	1	4
N.Y. City	26	26	14	15	82	59	110	178	5	6
N.J.	18	14	7	12	390	1,819	20	48	-	1
Pa.	54	73	13	18	1,557	1,672	18	35	-	7
E.N. CENTRAL	166	183	39	62	57	630	96	131	3	10
Ohio	67	81	15	10	45	32	16	21	1	3
Ind.	14	13	6	5	12	18	8	14	2	4
Ill.	-	20	1	21	-	29	24	56	-	3
Mich.	62	35	14	19	-	5	37	25	-	-
Wis.	23	34	3	7	U	546	11	15	-	-
W.N. CENTRAL	37	42	9	11	178	271	46	29	3	4
Minn.	9	9	-	-	111	215	16	6	1	2
Iowa	7	7	1	1	28	24	2	5	-	-
Mo.	10	17	5	6	28	26	13	10	2	2
N. Dak.	-	1	1	-	-	-	1	-	-	-
S. Dak.	2	3	-	-	1	-	-	-	-	-
Nebr.	9	4	1	1	5	4	5	2	-	-
Kans.	-	1	1	3	5	2	9	6	-	-
S. ATLANTIC	125	113	57	53	843	744	245	214	1	5
Del.	7	4	-	2	110	123	2	1	-	-
Md.	20	27	11	9	481	460	79	89	-	3
D.C.	5	7	-	-	17	8	14	13	-	-
Va.	16	18	4	9	67	100	17	41	-	1
W. Va.	N	N	-	5	12	10	3	1	-	-
N.C.	7	7	4	2	92	29	16	11	-	-
S.C.	5	6	8	4	11	3	6	5	-	-
Ga.	10	9	13	11	1	-	59	37	-	1
Fla.	55	35	17	11	52	11	49	16	1	-
E.S. CENTRAL	23	48	10	18	31	44	13	28	-	2
Ky.	9	11	2	6	14	18	5	8	-	2
Tenn.	8	21	5	7	17	13	3	8	-	-
Ala.	6	12	3	5	-	7	3	4	-	-
Miss.	-	4	-	-	-	6	2	3	-	-
W.S. CENTRAL	8	19	11	30	16	67	10	70	1	1
Ark.	-	-	-	1	2	-	1	3	-	-
La.	1	6	-	-	1	4	3	5	-	-
Okla.	3	3	6	2	-	-	6	2	-	-
Tex.	4	10	5	27	13	63	-	60	1	1
MOUNTAIN	28	33	21	29	19	8	35	39	1	1
Mont.	3	-	-	-	-	-	1	2	-	-
Idaho	-	2	2	1	3	4	-	3	-	1
Wyo.	1	2	-	1	1	1	-	-	-	-
Colo.	6	11	4	8	6	-	19	20	-	-
N. Mex.	1	2	2	6	1	-	2	3	-	-
Ariz.	7	8	9	6	2	-	6	3	-	-
Utah	8	5	3	1	5	-	4	3	-	-
Nev.	2	3	1	6	1	3	3	5	1	-
PACIFIC	48	47	71	105	89	79	142	165	4	51
Wash.	5	7	8	7	7	6	14	5	-	15
Oreg.	N	N	8	6	12	8	7	12	-	2
Calif.	43	35	49	88	68	63	113	137	3	27
Alaska	-	1	-	-	2	2	2	1	-	-
Hawaii	-	4	6	4	N	N	6	10	1	7
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	2	1	-	N	N	-	4	-	-
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

[†] Of 19 cases reported, eight were indigenous and 11 were imported from another country.[‡] Of 97 cases reported, 46 were indigenous and 51 were imported from another country.

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 7, 2002, and September 8, 2001 (36th Week)*

Reporting Area	Meningococcal Disease		Mumps		Pertussis		Rabies, Animal	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	1,215	1,729	182	170	5,004	3,553	4,090	4,989
NEW ENGLAND	74	80	7	1	412	308	620	505
Maine	7	1	-	-	7	-	40	47
N.H.	10	10	4	-	9	14	30	15
Vt.	4	5	-	-	81	25	77	47
Mass.	35	46	2	1	285	247	200	188
R.I.	5	3	-	-	10	5	50	46
Conn.	13	15	1	-	20	17	223	162
MID. ATLANTIC	122	186	17	20	230	241	768	891
Upstate N.Y.	37	50	2	3	169	113	484	559
N.Y. City	20	30	1	11	8	39	10	23
N.J.	23	31	1	2	3	13	116	143
Pa.	42	75	13	4	50	76	158	166
E.N. CENTRAL	160	262	18	21	598	532	105	110
Ohio	61	72	3	1	303	224	25	36
Ind.	25	29	2	1	67	50	27	1
Ill.	31	63	6	16	95	52	21	21
Mich.	31	57	6	2	39	49	32	37
Wis.	12	41	1	1	94	157	-	15
W.N. CENTRAL	111	109	13	7	470	183	291	272
Minn.	26	16	3	3	208	70	30	30
Iowa	14	21	1	-	125	17	57	64
Mo.	39	40	3	-	91	73	38	32
N. Dak.	-	5	1	-	-	-	12	30
S. Dak.	2	5	-	-	5	3	47	40
Nebr.	24	11	-	1	4	4	-	4
Kans.	6	11	5	3	37	16	107	72
S. ATLANTIC	216	270	21	27	299	174	1,735	1,705
Del.	6	3	-	-	2	-	24	30
Md.	7	35	4	4	47	30	168	342
D.C.	-	-	-	-	1	1	-	-
Va.	29	31	3	6	107	30	355	298
W. Va.	4	11	-	-	29	2	133	107
N.C.	25	58	1	3	28	51	508	411
S.C.	19	29	2	2	31	25	87	87
Ga.	29	37	4	8	17	17	284	295
Fla.	97	66	7	4	37	18	176	135
E.S. CENTRAL	69	109	12	6	160	100	91	178
Ky.	11	19	4	1	67	31	18	19
Tenn.	28	44	2	-	59	38	66	106
Ala.	18	30	3	-	27	27	7	51
Miss.	12	16	3	5	7	4	-	2
W.S. CENTRAL	141	263	16	9	1,323	338	88	845
Ark.	21	18	-	-	435	16	2	-
La.	24	64	1	2	6	5	-	7
Okla.	17	25	-	-	12	12	86	52
Tex.	79	156	15	7	817	305	-	786
MOUNTAIN	74	75	13	12	640	1,073	202	207
Mont.	2	3	-	1	4	20	10	31
Idaho	3	7	1	1	52	167	24	15
Wyo.	-	4	-	1	10	1	15	26
Colo.	23	29	2	3	252	229	35	-
N. Mex.	4	9	1	2	136	93	7	12
Ariz.	23	11	1	1	105	489	101	114
Utah	4	7	5	1	44	61	7	8
Nev.	15	5	3	2	37	13	3	1
PACIFIC	248	375	65	67	872	604	190	276
Wash.	50	52	-	1	324	105	-	-
Oreg.	36	48	N	N	147	39	3	2
Calif.	153	262	52	29	383	428	163	236
Alaska	3	2	-	1	4	3	24	38
Hawaii	6	11	13	36	14	29	-	-
Guam	-	-	-	-	-	-	-	-
P.R.	4	5	-	-	2	-	49	69
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	1	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 7, 2002, and September 8, 2001 (36th Week)*

Reporting Area	Rocky Mountain Spotted Fever		Rubella				Salmonellosis	
			Rubella		Congenital Rubella			
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	622	394	8	16	2	-	24,472	25,940
NEW ENGLAND	-	3	-	-	-	-	1,417	1,759
Maine	-	-	-	-	-	-	100	144
N.H.	-	1	-	-	-	-	86	134
Vt.	-	-	-	-	-	-	47	56
Mass.	-	2	-	-	-	-	793	1,026
R.I.	-	-	-	-	-	-	101	85
Conn.	-	-	-	-	-	-	290	314
MID. ATLANTIC	35	24	3	7	-	-	2,968	3,474
Upstate N.Y.	7	2	1	1	-	-	973	795
N.Y. City	8	1	-	5	-	-	888	875
N.J.	9	6	2	1	-	-	433	882
Pa.	11	15	-	-	-	-	694	922
E.N. CENTRAL	14	15	-	2	-	-	3,600	3,605
Ohio	10	1	-	-	-	-	946	967
Ind.	2	1	-	-	-	-	315	360
Ill.	-	12	-	2	-	-	1,118	1,055
Mich.	2	1	-	-	-	-	631	624
Wis.	-	-	-	-	-	-	590	599
W.N. CENTRAL	79	56	-	3	-	-	1,710	1,547
Minn.	-	-	-	-	-	-	400	444
Iowa	2	2	-	1	-	-	285	225
Mo.	72	52	-	1	-	-	604	409
N. Dak.	-	-	-	-	-	-	25	43
S. Dak.	-	2	-	-	-	-	70	114
Nebr.	4	-	-	-	-	-	116	117
Kans.	1	-	-	1	-	-	210	195
S. ATLANTIC	324	183	-	3	-	-	6,574	5,782
Del.	4	3	-	-	-	-	53	64
Md.	41	34	-	-	-	-	658	565
D.C.	-	-	-	-	-	-	50	57
Va.	22	16	-	-	-	-	661	965
W. Va.	1	-	-	-	-	-	93	84
N.C.	188	101	-	-	-	-	867	818
S.C.	43	17	-	2	-	-	411	573
Ga.	18	8	-	-	-	-	1,220	1,111
Fla.	7	4	-	1	-	-	2,561	1,545
E.S. CENTRAL	64	81	-	-	1	-	1,725	1,646
Ky.	3	2	-	-	-	-	229	246
Tenn.	46	53	-	-	1	-	476	412
Ala.	15	13	-	-	-	-	496	441
Miss.	-	13	-	-	-	-	524	547
W.S. CENTRAL	89	23	2	-	-	-	1,753	3,173
Ark.	28	5	-	-	-	-	604	510
La.	-	2	-	-	-	-	211	552
Okla.	61	16	-	-	-	-	303	292
Tex.	-	-	2	-	-	-	635	1,819
MOUNTAIN	12	9	-	-	-	-	1,390	1,481
Mont.	1	1	-	-	-	-	64	50
Idaho	-	1	-	-	-	-	99	100
Wyo.	3	2	-	-	-	-	43	52
Colo.	2	1	-	-	-	-	316	411
N. Mex.	1	1	-	-	-	-	204	186
Ariz.	-	-	-	-	-	-	396	406
Utah	-	3	-	-	-	-	132	150
Nev.	5	-	-	-	-	-	136	126
PACIFIC	5	-	3	1	1	-	3,335	3,473
Wash.	-	-	-	-	-	-	311	354
Oreg.	2	-	-	-	-	-	253	204
Calif.	3	-	3	-	-	-	2,528	2,635
Alaska	-	-	-	-	-	-	42	28
Hawaii	-	-	-	1	1	-	201	252
Guam	-	-	-	-	-	-	-	19
P.R.	-	-	-	3	-	-	136	676
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	25	U

N: Not notifiable. U: Unavailable. -: No reported cases.

* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 7, 2002, and September 8, 2001 (36th Week)*

Reporting Area	Shigellosis		Streptococcal Disease, Invasive, Group A		Streptococcus pneumoniae, Drug Resistant, Invasive		Streptococcus pneumoniae, Invasive (<5 Years)	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	10,621	12,475	3,125	2,728	1,549	2,000	165	308
NEW ENGLAND	213	221	149	172	14	95	2	32
Maine	3	6	20	10	-	-	-	-
N.H.	6	4	29	N	-	-	-	-
Vt.	-	7	9	N	-	-	N	N
Mass.	135	151	77	9	4	7	1	-
R.I.	8	16	55	55	N	N	N	N
Conn.	59	37	14	8	10	3	1	3
MID. ATLANTIC	786	1,083	-	90	-	85	-	29
Upstate N.Y.	193	384	508	506	85	131	49	78
N.Y. City	265	298	237	212	75	125	49	78
N.J.	197	213	125	141	U	U	U	U
Pa.	131	188	103	101	N	N	N	N
E.N. CENTRAL	1,129	3,030	43	52	10	6	-	-
Ohio	452	2,009	552	640	167	135	69	84
Ind.	64	157	174	162	33	-	1	-
Ill.	391	419	41	49	129	135	43	40
Mich.	119	214	105	210	2	-	-	44
Wis.	103	231	232	168	3	-	N	N
W.N. CENTRAL	769	1,115	-	51	N	N	25	-
Minn.	158	323	189	281	159	108	36	48
Iowa	97	313	98	126	48	50	36	40
Mo.	122	218	-	-	N	N	N	N
N. Dak.	15	20	38	58	6	9	-	-
S. Dak.	150	122	-	11	1	5	-	8
Nebr.	161	58	11	9	1	3	-	-
Kans.	66	61	16	32	26	13	N	N
S. ATLANTIC	4,091	1,650	26	45	77	88	N	N
Del.	83	9	613	457	952	1,073	4	5
Md.	798	109	2	2	3	3	N	N
D.C.	40	43	99	N	N	N	N	N
Va.	627	208	6	15	48	5	1	3
W. Va.	8	8	57	62	N	N	N	N
N.C.	242	253	16	18	36	37	3	2
S.C.	69	204	105	122	N	N	U	U
Ga.	1,044	221	29	9	139	220	N	N
Fla.	1,180	595	137	147	257	309	N	N
E.S. CENTRAL	876	1,086	162	82	469	499	N	N
Ky.	91	433	74	83	103	196	-	-
Tenn.	50	71	13	29	12	23	N	N
Ala.	472	176	61	54	91	172	N	N
Miss.	263	406	-	-	-	1	N	N
W.S. CENTRAL	776	2,005	-	-	-	-	-	-
Ark.	151	438	101	246	37	227	3	61
La.	105	175	5	-	6	14	-	-
Okla.	323	38	-	1	31	213	1	61
Tex.	197	1,354	35	35	N	N	2	-
MOUNTAIN	475	657	61	210	N	N	-	-
Mont.	3	2	496	286	32	32	2	-
Idaho	5	25	-	-	-	-	-	-
Wyo.	6	4	6	7	N	N	N	N
Colo.	91	166	7	8	9	5	-	-
N. Mex.	96	83	165	121	-	-	-	-
Ariz.	214	272	77	61	22	25	-	-
Utah	26	45	213	86	-	-	N	N
Nev.	34	60	28	3	1	-	2	-
PACIFIC	1,506	1,628	-	-	-	2	-	-
Wash.	101	142	443	57	-	3	-	-
Oreg.	77	80	65	-	-	-	-	-
Calif.	1,285	1,356	N	N	N	N	N	N
Alaska	3	4	323	-	N	N	N	N
Hawaii	40	46	-	-	-	-	N	N
Guam	-	37	55	57	-	3	-	-
P.R.	5	15	-	1	-	-	-	-
V.I.	-	-	N	N	-	-	-	-
Amer. Samoa	U	U	-	-	-	-	N	N
C.N.M.I.	17	U	U	U	-	-	U	U

N: Not notifiable. U: Unavailable. -: No reported cases.

* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending September 7, 2002, and September 8, 2001 (36th Week)*

Reporting Area	Syphilis				Tuberculosis		Typhoid Fever	
	Primary & Secondary		Congenital		Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001				
UNITED STATES	4,201	4,057	213	355	7,771	9,297	172	236
NEW ENGLAND	95	36	-	3	260	319	12	12
Maine	2	-	-	-	10	12	-	1
N.H.	3	1	-	-	9	11	-	1
Vt.	1	2	-	-	-	4	-	-
Mass.	64	18	-	2	146	169	9	9
R.I.	5	7	-	-	25	42	-	-
Conn.	20	8	-	1	70	81	3	1
MID. ATLANTIC	466	344	37	53	1,480	1,545	41	77
Upstate N.Y.	24	15	4	3	221	239	6	14
N.Y. City	278	191	15	27	756	777	20	32
N.J.	92	78	17	23	332	345	12	27
Pa.	72	60	1	-	171	184	3	4
E.N. CENTRAL	717	706	29	53	823	959	15	30
Ohio	98	59	1	2	132	187	5	3
Ind.	49	116	-	8	76	70	2	2
Ill.	203	234	21	34	408	454	1	16
Mich.	353	278	7	5	166	199	3	5
Wis.	14	19	-	4	41	49	4	4
W.N. CENTRAL	73	65	-	9	363	365	7	8
Minn.	34	26	-	2	152	159	3	4
Iowa	2	4	-	-	17	18	-	-
Mo.	19	14	-	5	102	92	1	4
N. Dak.	-	-	-	-	1	3	-	-
S. Dak.	-	-	-	-	9	10	-	-
Nebr.	3	3	-	-	17	27	3	-
Kans.	15	18	-	2	65	56	-	-
S. ATLANTIC	1,128	1,407	51	84	1,573	1,744	28	28
Del.	9	10	-	-	13	15	-	-
Md.	133	175	8	3	189	152	6	8
D.C.	62	22	1	2	-	51	-	-
Va.	46	78	1	4	131	175	1	8
W. Va.	2	-	-	-	24	21	-	-
N.C.	204	322	17	10	225	232	1	2
S.C.	82	181	5	18	116	130	-	-
Ga.	235	262	7	18	295	309	6	7
Fla.	355	357	12	29	590	659	12	3
E.S. CENTRAL	329	438	11	24	489	569	4	1
Ky.	65	31	2	-	94	84	4	-
Tenn.	126	235	3	14	195	211	-	1
Ala.	104	84	4	4	133	181	-	-
Miss.	34	88	2	6	67	93	-	-
W.S. CENTRAL	590	502	47	61	1,023	1,427	4	14
Ark.	20	29	1	6	88	100	-	-
La.	100	113	-	-	-	85	-	-
Okla.	48	48	2	5	90	101	4	14
Tex.	422	314	44	50	845	1,141	-	-
MOUNTAIN	189	155	12	20	240	369	9	8
Mont.	-	-	-	-	6	6	-	1
Idaho	1	1	1	-	8	7	-	-
Wyo.	-	1	-	1	2	3	5	1
Colo.	30	18	1	2	39	90	-	-
N. Mex.	22	13	-	2	21	44	-	1
Ariz.	125	111	10	17	133	136	2	1
Utah	5	7	-	-	18	25	2	4
Nev.	6	4	-	-	13	58	2	-
PACIFIC	614	404	26	48	1,520	2,000	52	58
Wash.	37	37	1	-	155	167	4	3
Oreg.	11	11	1	-	72	77	2	6
Calif.	559	346	23	48	1,150	1,624	45	46
Alaska	-	-	-	-	33	35	-	1
Hawaii	7	10	1	-	110	97	1	2
Guam	-	2	-	1	-	47	-	2
P.R.	155	191	12	7	33	95	-	-
V.I.	1	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	15	U	-	U	29	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
 * Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE III. Deaths in 122 U.S. cities,* week ending September 7, 2002 (36th Week)

All Causes, By Age (Years)								All Causes, By Age (Years)								
Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	P&I† Total	Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	P&I† Total	
NEW ENGLAND	502	337	102	37	19	7	56	S. ATLANTIC	873	513	213	95	30	21	66	
Boston, Mass.	150	82	33	18	12	5	17	Atlanta, Ga.	U	U	U	U	U	U	U	
Bridgeport, Conn.	29	24	3	2	-	-	4	Baltimore, Md.	181	95	51	29	4	2	18	
Cambridge, Mass.	12	7	5	-	-	-	3	Charlotte, N.C.	85	55	14	11	2	3	15	
Fall River, Mass.	17	16	1	-	-	-	1	Jacksonville, Fla.	127	70	36	15	2	4	7	
Hartford, Conn.	64	48	11	4	-	1	4	Miami, Fla.	69	40	20	4	3	1	7	
Lowell, Mass.	16	12	2	1	1	-	3	Norfolk, Va.	37	21	8	2	4	2	-	
Lynn, Mass.	10	5	4	-	1	-	-	Richmond, Va.	63	34	17	6	2	4	2	
New Bedford, Mass.	22	19	3	-	-	-	2	Savannah, Ga.	25	14	7	3	-	1	4	
New Haven, Conn.	34	21	8	3	2	-	7	St. Petersburg, Fla.	40	27	10	1	2	-	4	
Providence, R.I.	U	U	U	U	U	U	U	Tampa, Fla.	144	102	27	10	3	2	9	
Somerville, Mass.	6	3	-	2	1	-	1	Washington, D.C.	102	55	23	14	8	2	1	
Springfield, Mass.	41	24	13	3	1	-	4	Wilmington, Del.	U	U	U	U	U	U	U	
Waterbury, Conn.	44	36	5	2	-	1	4	E.S. CENTRAL	513	351	105	38	13	5	34	
Worcester, Mass.	57	40	14	2	1	-	6	Birmingham, Ala.	169	122	29	11	4	2	17	
MID. ATLANTIC	1,959	1,331	415	145	32	36	81	Chattanooga, Tenn.	64	42	14	4	3	1	3	
Albany, N.Y.	37	22	10	4	1	-	4	Knoxville, Tenn.	58	36	17	2	3	-	-	
Allentown, Pa.	19	14	3	2	-	-	2	Lexington, Ky.	43	30	7	5	1	-	2	
Buffalo, N.Y.	120	88	26	1	2	3	15	Memphis, Tenn.	U	U	U	U	U	U	U	
Camden, N.J.	35	24	7	1	2	1	2	Mobile, Ala.	34	22	10	1	-	1	1	
Elizabeth, N.J.	24	15	6	2	1	-	1	Montgomery, Ala.	37	26	7	3	-	1	2	
Erie, Pa.	61	47	9	2	3	-	3	Nashville, Tenn.	108	73	21	12	2	-	9	
Jersey City, N.J.	44	26	10	6	-	2	-	W.S. CENTRAL	1,091	681	256	82	38	33	68	
New York City, N.Y.	959	674	189	72	14	10	25	Austin, Tex.	81	54	19	7	-	1	2	
Newark, N.J.	36	11	12	12	-	1	-	Baton Rouge, La.	41	27	7	5	2	-	-	
Paterson, N.J.	30	15	10	3	1	1	1	Corpus Christi, Tex.	35	17	14	3	1	-	4	
Philadelphia, Pa.	258	140	77	26	3	12	10	Dallas, Tex.	193	114	44	18	14	3	18	
Pittsburgh, Pa.‡	23	16	6	1	-	-	3	El Paso, Tex.	43	33	8	2	-	-	3	
Reading, Pa.	16	13	1	1	1	-	2	Ft. Worth, Tex.	95	61	23	7	2	2	3	
Rochester, N.Y.	142	114	18	4	3	3	11	Houston, Tex.	235	134	68	19	6	8	13	
Schenectady, N.Y.	27	21	6	-	-	-	3	Little Rock, Ark.	60	33	12	3	7	5	-	
Scranton, Pa.	25	21	3	1	-	-	-	New Orleans, La.	U	U	U	U	U	U	U	
Syracuse, N.Y.	45	34	8	2	1	-	4	San Antonio, Tex.	179	122	35	11	2	8	14	
Trenton, N.J.	28	14	8	3	-	3	1	Shreveport, La.	40	25	12	2	1	-	2	
Utica, N.Y.	11	8	2	1	-	-	2	Tulsa, Okla.	89	61	14	5	3	6	9	
Yonkers, N.Y.	19	14	4	1	-	-	2	MOUNTAIN	616	395	144	45	21	11	24	
E.N. CENTRAL	1,394	939	292	94	34	35	81	Albuquerque, N.M.	82	55	21	4	2	-	2	
Akron, Ohio	55	39	8	6	1	1	7	Boise, Idaho	33	20	7	1	2	3	2	
Canton, Ohio	43	33	7	1	-	2	2	Colo. Springs, Colo.	58	39	12	5	2	-	-	
Chicago, Ill.	U	U	U	U	U	U	U	Denver, Colo.	80	47	17	9	4	3	2	
Cincinnati, Ohio	77	46	21	6	1	3	2	Las Vegas, Nev.	200	123	55	13	6	3	8	
Cleveland, Ohio	131	78	26	17	4	6	4	Ogden, Utah	24	15	7	1	1	-	1	
Columbus, Ohio	164	111	34	8	6	5	12	Phoenix, Ariz.	U	U	U	U	U	U	U	
Dayton, Ohio	90	59	23	5	2	1	5	Pueblo, Colo.	35	29	5	-	1	-	5	
Detroit, Mich.	177	91	55	23	5	3	9	Salt Lake City, Utah	104	67	20	12	3	2	4	
Evansville, Ind.	45	37	4	3	1	-	3	Tucson, Ariz.	U	U	U	U	U	U	U	
Fort Wayne, Ind.	42	32	10	-	-	-	5	PACIFIC	1,329	884	294	83	43	24	70	
Gary, Ind.	11	8	3	-	-	-	-	Berkeley, Calif.	14	11	1	1	-	1	1	
Grand Rapids, Mich.	33	21	8	2	1	1	6	Fresno, Calif.	85	52	19	10	4	-	5	
Indianapolis, Ind.	135	91	32	5	3	4	10	Glendale, Calif.	18	12	4	1	1	-	-	
Lansing, Mich.	35	26	8	1	-	-	-	Honolulu, Hawaii	78	52	15	6	2	3	6	
Milwaukee, Wis.	83	58	16	3	4	2	4	Long Beach, Calif.	51	33	13	2	2	1	5	
Peoria, Ill.	46	36	9	-	-	1	3	Los Angeles, Calif.	314	207	69	21	13	4	-	
Rockford, Ill.	36	20	10	3	3	-	1	Pasadena, Calif.	16	13	2	-	-	1	4	
South Bend, Ind.	66	53	7	3	2	1	7	Portland, Oreg.	108	72	24	7	3	1	5	
Toledo, Ohio	81	58	9	8	1	5	-	Sacramento, Calif.	135	94	30	4	4	3	12	
Youngstown, Ohio	44	42	2	-	-	-	1	San Diego, Calif.	118	76	30	4	5	3	13	
W.N. CENTRAL	403	269	78	32	13	11	19	San Francisco, Calif.	U	U	U	U	U	U	U	
Des Moines, Iowa	73	53	13	5	1	1	3	San Jose, Calif.	141	99	28	10	2	2	9	
Duluth, Minn.	35	26	5	1	3	-	5	Santa Cruz, Calif.	24	14	5	3	2	-	2	
Kansas City, Kans.	7	5	-	1	1	-	1	Seattle, Wash.	85	53	21	7	2	2	3	
Kansas City, Mo.	69	43	11	9	2	4	-	Spokane, Wash.	61	42	14	2	2	1	-	
Lincoln, Nebr.	27	21	6	-	-	-	-	Tacoma, Wash.	81	54	19	5	1	2	5	
Minneapolis, Minn.	48	31	10	3	1	3	1	TOTAL	8,680	5,700	1,899	651	243	183	509	
Omaha, Nebr.	70	38	19	7	3	3	6									
St. Louis, Mo.	U	U	U	U	U	U	U									
St. Paul, Minn.	49	34	11	3	1	-	2									
Wichita, Kans.	25	18	3	3	1	-	1									

U: Unavailable. -/No reported cases.

* Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

† Pneumonia and influenza.

‡ Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

§ Total includes unknown ages.

(Continued from page 812)

FIGURE 2. Number of West Nile virus cases in humans*, by county — Texas, January 1–September 9, 2002



* n=67.

Additional information about WNV activity in Texas is available at <http://www.tdh.state.tx.us>. Additional information about WNV activity is available at <http://www.cdc.gov/ncidod/dvbid/westnile/index.htm> and http://www.cindi.usgs.gov/hazard/event/west_nile/west_nile.html.

Public Health Dispatch

Investigation of Blood Transfusion Recipients with West Nile Virus Infections

An investigation conducted by CDC, the Food and Drug Administration (FDA), the American Red Cross, and state health departments in Georgia and Florida has confirmed transmission of West Nile virus (WNV) from a single organ donor to four organ recipients (1). During treatment for injuries that eventually proved fatal, the organ donor received

numerous transfusions of blood products. However, the source of the organ donor's infection remains unknown.

Subsequently, CDC has been informed of four other patients with WNV infection diagnosed after receiving units of blood in the weeks before WNV diagnosis. Because each of these patients resided in areas with high levels of WNV activity, the most likely mode of infection is mosquito exposure. To rule out blood transfusion-associated transmission, investigations are ongoing and efforts are under way to contact donors of blood given to these patients and other recipients of blood from these donors for follow-up and WNV testing. In each instance, precautionary measures have included a withdrawal of any remaining blood products obtained from the donors whose blood was given to these patients.

The investigations of the organ donor and four other transfusion recipient patients involve follow-up of approximately 100 donors. Initial testing by a quantitative polymerase chain reaction (PCR) assay (TaqMan®) of stored blood specimens obtained from the blood donors at the time of donation has been completed for two investigations. In one investigation, both donors tested negative for WNV. In the second investigation, in which specimens for 15 of 17 donors were available, specimens from three donors had evidence of WNV viral RNA, suggesting that these donors might have had WNV infection at the time of donation. In addition, plasma derived from a donation by one of these three donors also had evidence of WNV RNA. These results are preliminary because all of the specimens available for testing in both investigations were initially processed and stored as part of routine blood collection procedures, which could affect test validity. Therefore, additional follow-up testing and epidemiologic investigation of these donors are necessary.

In cases of suspected WNV meningitis or encephalitis in recent (e.g., ≤ 4 weeks before onset of illness) recipients of blood or organs, clinicians should contact local public health authorities to initiate an investigation. Serum or tissue samples should be retained for later studies.

Reference

1. CDC. West Nile virus infection in organ donor and transplant recipients—Georgia and Florida, 2002. *MMWR* 2002;51:790.

All *MMWR* references are available on the Internet at <http://www.cdc.gov/mmwr>. Use the search function to find specific articles.

Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

References to non-CDC sites on the Internet are provided as a service to *MMWR* readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of these sites. URL addresses listed in *MMWR* were current as of the date of publication.

The *Morbidity and Mortality Weekly Report (MMWR)* Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format and on a paid subscription basis for paper copy. To receive an electronic copy each week, send an e-mail message to listserv@listserv.cdc.gov. The body content should read *SUBscribe mmwr-toc*. Electronic copy also is available from CDC's World-Wide Web server at <http://www.cdc.gov/mmwr> or from CDC's file transfer protocol server at <ftp://ftp.cdc.gov/pub/publications/mmwr>. To subscribe for paper copy, contact Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone 202-512-1800.

Data in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the following Friday. Address inquiries about the *MMWR* Series, including material to be considered for publication, to Editor, *MMWR* Series, Mailstop C-08, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333; telephone 888-232-3228.

All material in the *MMWR* Series is in the public domain and may be used and reprinted without permission; citation as to source, however, is appreciated.

☆U.S. Government Printing Office: 2002-733-100/69058 Region IV



DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)
ATLANTA, GA 30333

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300
RETURN SERVICE REQUESTED

0206 93036 RR-13 0001
PROQUEST INFORMATION & LEARNING
PERIODICALS ACQUISITION
PO BOX 1346
ANN ARBOR MI 48106-1346

FIRST-CLASS MAIL
POSTAGE & FEES PAID
PHS/CDC
Permit No. G-284

